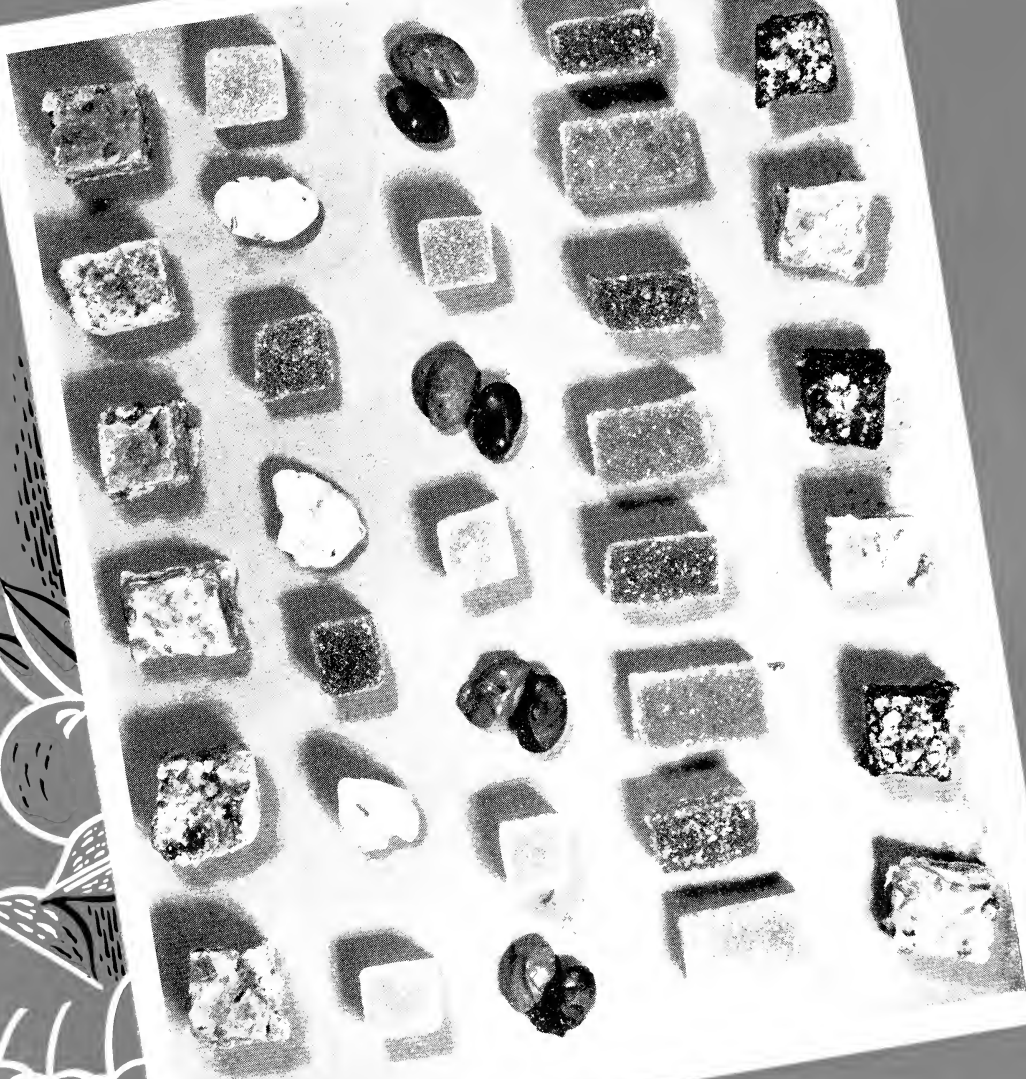


# homemade fruit candies

W. V. CRUESS and FLORENCE PEN

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*Practically everyone likes candy, and almost every homemaker occasionally tries her hand at making candy in her own kitchen. Many good candy recipes are available, but few of them include fruit as an ingredient. Yet the addition of fruit to some of the old favorites not only makes them tastier, but also increases their food value.*

*Material in this circular is based on experiments with fruit candies conducted by the University of California's Division of Food Technology over the past 20 years.*

*The recipes included are intended for the homemaker who wishes to make only a small amount of candy, but the experienced candymaker should find them adaptable to large-scale, commercial production after making preliminary, small-scale test batches.*

*This circular supersedes Extension Circular 10.*

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# *For making homemade fruit candies you will need these supplies . . .*

Before you begin your candymaking, check over the following list to make sure you have all the necessary tools. Most of the items are probably already in your kitchen.

**Candy thermometer.** This takes the guesswork out of candymaking and will be one of your most useful tools (fig. 1). It should have a scale ranging from room temperature to 300° F or above. (A chemistry laboratory thermometer with the correct temperature range may also be used.)

**NOTE:** If you use a dairy thermometer, check it for accuracy. In actively boiling water, it should show a reading of 212° F at or near sea level.

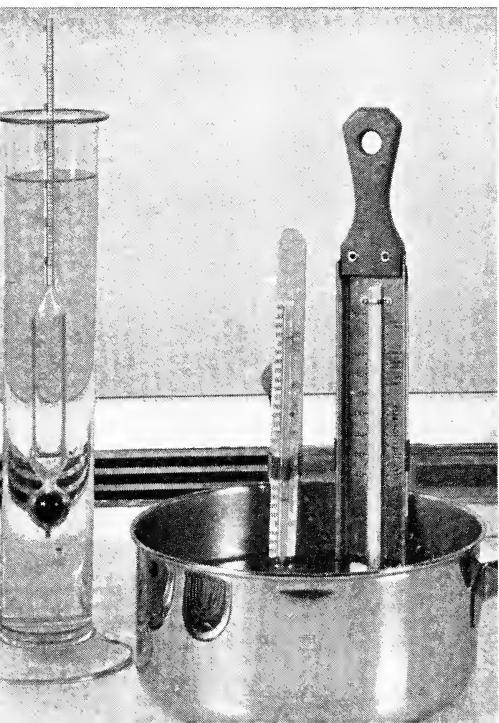
**Measuring cup and spoons.** Correct measurements are important—your cup and spoons should be accurate (fig. 2).

Ordinary kitchen spoons and teacups are not reliable for exact measurements.

**Kitchen scales.** Ingredients are sometimes measured by weight rather than by cup. In such cases, kitchen scales are a help (fig. 2).

**Sirup hydrometer.** This is used to test the density of sirups for candied fruits (fig. 1). Several types are available. For home use, a Balling or Brix hydrometer reading from 0° to 70° is recommended. Both give the same reading, so that if a sirup tests 50° Balling it will also test 50° Brix, and have the same density as a pure sugar sirup containing 50 per cent cane or beet sugar. You will also need a tall, narrow cylinder 12 to 15 inches high and about 1½ inches in diameter, to hold the sirup for making the necessary test with the hydrometer.

Fig. 1, left: hydrometer and two types of candy thermometers. Fig. 2, right: kitchen scales, measuring cup, and measuring spoons.



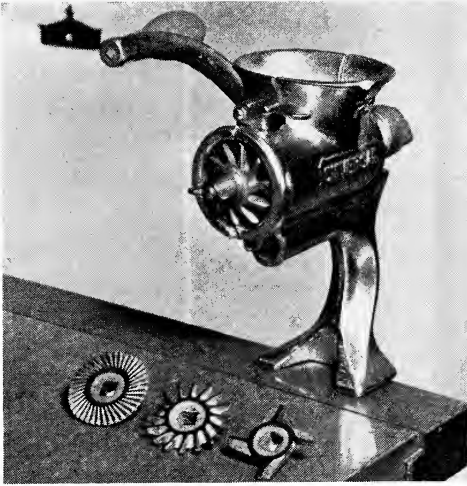


Fig. 3. Small-sized food grinder with various knives.

This may be bought at a drugstore or laboratory supply house. Or you may make your own from tin sheet metal or a short piece of water pipe and a block of wood.

**Dehydrater.** A small drier is desirable for use in candying and glacéing fruit at home. It should hold from 25 to 50 pounds of fruit, and can be made of scrap lumber. A portable kerosene stove may provide the heat. A list of materials, and specifications for making such a dehydrater are given in Agricultural Extension Service Leaflet H.D. 21, "Drying of

Vegetables and Fruits in the Home." The leaflet may be obtained from the Public Service Office, College of Agriculture, Berkeley 4, Calif.

**Electric mixer.** If available, this is a great time and energy saver in stirring or whipping some types of candy after cooking.

**Other equipment and supplies.** You will also need a small food grinder (fig. 3) with blades for coarse, medium, and fine grinding; saucepans; shallow baking pans; and one or two large cooking spoons.

Supplies most frequently called for are: sugar, powdered sugar, corn sirup, corn starch, fruit pectin, and fruit acid, such as citric. And, of course, whatever fruits you wish to use.

**Sugars and sirups.** In this circular, whenever a recipe calls for sugar, either cane or beet sugar may be used. Both are sucrose, and are chemically identical. (Another sugar, dextrose, is commonly used by commercial candymakers, but is not normally used by the homemaker.)

Where sirup is called for, any good brand of white corn sirup is satisfactory. (Commercial candymakers use either a highly refined corn sirup that is known as confectioners' glucose, or an invert sirup not readily available for home use.)

## *Your candies will look professional if...*

you become familiar with the general processes listed below before you choose the specific recipes you wish to use. These processes and terms are used in making several types of candy.

**Casting in cornstarch** means pouring liquid candy into dry starch molds and allowing it to harden. These molded centers may then be dipped in chocolate or other coating. Here is how it is done: Use any good grade of cornstarch. *Be sure it is dry.* Put a layer of starch about 1 inch thick into a wooden tray or a

shallow pan (fig. 4). Make impressions in the starch in whatever size and shape you want the finished candy to be. (This may be done with a knife handle.) If the starch is thoroughly dry, you will have no trouble making the depressions smooth and uniform. With continued use, the starch becomes moist and must then be dried in a slow oven.

This process is satisfactory for fruit-jelly centers and for marshmallows or thin fondant containing fruit juice or pulp. Fruit centers formed in this manner

are drier at the surface and may be dipped more easily than if they are hardened in sheets and then cut into pieces for dipping.

The following procedure may be used for candies that are to be dipped: When candy has been cooked according to the recipe, pour it into the starch molds while it is still hot, and allow it to stand overnight to harden. To separate the pieces from the starch, shake the starch through a colander or coarse sieve. Brush the pieces free of remaining starch and dip them in chocolate (see below) or dust with powdered sugar. Or they may be moistened with water or sirup and coated with granulated sugar.

**Chocolate coating.** Fruit candies may be coated with chocolate in the same way as are other candy centers.

There are three kinds of chocolate coating—sweet, milk, and bitter—and a number of different qualities of each. Milk chocolate is best for fruit candy centers because it does not mask their

delicate flavor so much as do bitter and sweet chocolates.

Ordinary bar chocolate is not suitable because it melts at too high a temperature and is not smooth enough in texture. For large quantities of candy, confectioners' dipping chocolate is best. This may be bought at a confectioners' supply house or from a manufacturer or wholesaler. For home candymaking,  $\frac{1}{3}$  to  $\frac{1}{4}$  pound is required for each pound of candy.

Melting the chocolate requires great care. If it reaches too high a temperature, it will be unattractively streaked with gray when it cools. The following method is recommended for homemade candies: Cut chocolate into small pieces. Place it in a saucepan. Heat a large pan of water nearly to boiling (for sweet chocolate) or to about  $140^{\circ}$  F for milk chocolate. Remove it from the heat. Set the small pan of chocolate in the hot water and stir the chocolate until it is melted. The temperature should never go much above blood heat (about  $100^{\circ}$  F). Stirring with the



Fig. 4. Equipment for casting fruit candy in starch, showing pan, with thermometer; starch, with fruit centers in molds; and fruit centers that have been removed from molds.

hand is a good way to keep the temperature controlled, provided the hand is thoroughly dry. Excess moisture causes chocolate to turn gray. If the chocolate becomes too warm, remove it from the heat at once.

When the chocolate is completely melted, remove it from the hot water and cool it to about 85° F—or until thick enough for dipping purposes. It may be cooled in the pan or on an oiled marble slab. While the chocolate is cooling, stir it to break up small lumps and make it as smooth as possible. When it begins to harden at the edges, it is ready to use. Most beginners make the mistake of using the coating while it is still too warm or too thin.

The centers must be dry on the surface before they are dipped. The room in which the candy is being made should be at a temperature of 65°–70° F, as should the centers to be dipped. If the centers are too cold, the coating may turn gray; if the room is too warm, the coating will be too thin or will not harden.

The candy may be held on a fork, dipped in the chocolate, and placed on waxed or oiled paper to harden. (Professional candy dippers take the piece of candy in the fingers, roll it in the melted chocolate for an instant, remove it with the middle finger and thumb, and place it on oiled paper. As the candy is released, the point of the thumb is held above it for an instant, and the thumb is moved so that the string of melted chocolate dripping from it forms a design on the top of the candy.)

When the chocolate becomes too thick through cooling, more warm, melted chocolate may be added.

NOTE: Any dried fruit may also be coated with dipping chocolate. The fruit used should be tender, and its surface thoroughly dry. If dates or prunes are used, remove pits before dipping. These fruits may be stuffed with fondant or nuts before being dipped. Follow procedure described above.

Toasted or sugared almonds and plain or sugared walnuts may also be dipped in chocolate. Allow almonds to cool thoroughly before dipping. (See p. 17 for toasted almonds and sugared nuts.)

**Coating with fondant** improves some fruit candies. To make a fondant coating, add 1½ cups of sugar to ¼ cup of corn sirup or 3 tablespoons of honey. Cook the mixture to 238°–240° F (soft ball stage). Pour it onto a marble slab or into a shallow pan. Cool to about 110° F and knead with the hands or stir with a large spoon until fondant forms. If it is not to be used at once, place it in a jar and cover with a moist cloth.

To coat fruit candies, place the necessary amount of fondant in a double boiler and heat. When the water in the lower pan begins to boil, stir fondant constantly, and remove the pan from the heat. Stir until fondant is well melted but still white and creamy. Do not allow temperature to become too high or the fondant will form a hard coating or become a clear sirup. About 120° F is satisfactory. Add vanilla flavoring if desired.

Dip the candy according to directions for chocolate (p. 5) and place on oiled paper to dry. About 1 hour after dipping, loosen the candy to permit drying of the bottom. Allow to stand overnight before packing.

Fondant coatings made with corn sirup become very hard in time, and this type of candy should be eaten within a few days. Coatings made with honey remain soft much longer.

**Arctic ice coating.** This white coating blends well with fruit candies. Melt 1 cup unsalted, uncolored coconut fat or any good solid cooking fat. Add 1½ cups powdered sugar and ½ cup powdered whole milk. Mix to a smooth consistency and use for dipping according to directions for chocolate coating (p. 5). (Coconut fat may be bought at a candy store or from a confectioners' supply company. Do not use cocoa butter; it has too high a melting point.)

**Pouring and hardening.** When a recipe gives the direction “pour and allow to harden,” this means pour the hot or warm candy into an oiled pan, or one lined with waxed paper, and allow it to harden long enough so that it can be cut and handled. Or it may be poured onto oiled paper on which are four wooden strips to hold the candy in place.

**Don’t forget about altitude.** The boiling points of water and candy go down as altitude increases, so that they are lower at high altitudes than at or near sea level. Table 1 gives the approximate boiling point of water at various altitudes. To correct a recipe for altitude, take the boiling point of water at sea level minus the boiling point of water at your altitude. Subtract the remainder from the recommended boiling point in the recipe. For example: In making fondant, the mixture is cooked to a boiling point of 240° F at sea level. At 5,000 feet, water boils at 202° F instead of 212° F (sea level)—10 degrees lower. Therefore, at 5,000 feet, the mixture must be boiled to 240° F minus 10° F, or 230° F. If you are cooking at an altitude above sea level, you should correct all recipes according to Table 1.

TABLE 1—Boiling point of water at various altitudes

Altitude (feet)	Approximate boiling point of water
0	212° F
1,000	210
2,000	208
3,000	206
4,000	204
5,000	202
6,000	200
7,000	198
8,000	196.5
9,000	195
10,000	193

It is advisable to use an accurate thermometer to determine the end point of the boiling process. However, many homemakers successfully use the well-known “ball test”—dropping about ½ teaspoon of the boiling sirup into cold water and examining the chilled drop. As the boiling point increases, the sirup becomes more concentrated and the sample more firm. As noted, the boiling point of sirup, like that of water, is lower at elevations above sea level (see table 2).

TABLE 2—Relation of altitude to boiling point of sirups used in candymaking\*

Practical test	Boiling point		
	At sea level	At 2,000 ft.	At 4,000 ft.
Light string	226° F	222° F	218° F
Heavy string	230	226	222
Soft ball	238	234	230
Medium ball	240	236	232
Stiff ball	244	240	236
Hard ball	250	246	242
Light crack	254	250	246
Brittle crack	275	271	267
Hard crack	290	286	282

\* After Rigby, W. O., Reliable candy teacher, pp. 39–40. Rigby Publishing Company, Topeka, Kansas.



# *Recipes for every taste . . .*

In this section you will find specific recipes for many types of fruit candies. These recipes have been tested. For best results, use only top quality ingredients, and be sure that all your measurements are level.

## **Candied and Glacéed Fruits**

### **1. Preparing the fruit**

**Apricots, plums, and prunes:** Do not pit. Puncture to the pit in several places with a silver fork.

**Canned fruit** (fancy or choice quality preferred) : This is excellent for candied fruit. Drain off sirup. To each 2 cups sirup add 1 cup corn sirup; pour back over fruit and boil for 3 minutes. Let stand 24 hours. Then continue candying process beginning with step 3.

**Cherries** (Royal Ann preferred) : Remove stems and pits. (See special recipe for maraschino cherries, page 10.)

**Citrus fruits:** Cut oranges, lemons, grapefruit, and citron in half (cut citron lengthwise). Scoop out pulp and save peels for candying. Store citron peels for 3 weeks in a brine of 1½ pounds salt to 1 gallon water. This is not necessary for other citrus fruits, but they are improved by such treatment.

**Figs** (Kadota preferred) : No preparation necessary.

**Jujubes:** Puncture to the pit in several places with a silver fork, or make several lengthwise slits in the skin.

**Peaches:** Peel; pit; cut in half.

**Pears:** Peel; cut in half; core.

### **2. First boiling**

The object of the first boiling is to modify the texture of the fruit so that it will absorb the sirup without shriveling.

Boil orange, lemon, grapefruit, and citron peels in water until soft—about 1 hour. With grapefruit and citron peels, six or seven changes of water are necessary to get rid of bitterness.

When peels are thoroughly cooked and tender, place them in a sirup of 3 cups water and 1 cup corn sirup. Boil 5 minutes; set aside for 24 hours.

Boil other fruits until tender but not soft and mushy, using the same light sirup as for citrus.

Boiling time will vary, depending on the type of fruit. Plums, freestone peaches, and apricots will require 15 minutes or less; pears, clingstone peaches, and firm figs, 20 to 40 minutes. Keep the pan covered to prevent excessive evaporation during boiling. Set fruit and sirup aside in a jar or other convenient container for 24 hours. If the fruit floats, weight it down with a dinner plate or wooden float. (See page 10, step 8, for treatment of canned fruits.)

### **3. Second boiling**

About 24 hours after the first boiling, drain off the sirup and test it with a hydrometer. Prepare a mixture of equal parts sugar and either corn sirup *or* confectioners' glucose, *or* confectioners' invert sirup. To mix these, warm the sirup, add the sugar, and stir thoroughly. Add enough of this mixture to the fruit sirup to bring the hydrometer reading to 35°–40°. Make the test after the sugar has dissolved. If no hydrometer is available, measure the fruit sirup and add 1 cup of the new sirup mixture for every 4 cups fruit sirup.

Return fruit to blended sirup and boil for 2 to 3 minutes. Remove from stove and set aside for 24 hours.

### **4. Subsequent boilings**

Every 24 hours, for 4 days, drain the sirup from the fruit and add enough of the corn sirup-and-sugar mixture to bring the Balling reading up to 50° on the first day, 60° on the second, 70° on the third, and 74° on the fourth. Boil the fruit and sirup together each day for 2 to 3 minutes. If no hydrometer is available, measure





Fig. 5. An assortment of candied fruits and coated nuts makes an appetizing display.

the sirup each day and add 1 cup corn sirup mixture for every 4 cups fruit sirup. Repeat daily until fruit sirup is very thick—about like honey.

### 5. Storage in final sirup

When the fruit sirup is of the desired thickness, store the fruit in it for at least 2 weeks, to permit the fruit to become as plump as possible.

If at any time during this storage there is even the slightest evidence of fermentation or mold, boil fruit and sirup for 2 to 3 minutes. If sugar crystals appear, heat until they dissolve, and dilute the sirup slightly with water.

### 6. Drying

After fruit has been stored in sirup for 2 weeks or longer, remove it from sirup. Dip fruit quickly into hot water and drain free of sirup.

Place fruit on screen trays (window screen tacked to wooden frames will do)

and allow to dry until texture is about like that of commercially packed candied fruit (fig. 5).

A better method is to dry on screens in an evaporator or dehydrater, at 120° to 130° F, until desired texture is reached. Usually from 4 to 6 hours are required. (See information on dehydraters, p. 4.)

Pack candy in boxes after drying.

### 7. Pectin glacé

Fruit prepared for drying (see 6, above) will be more attractive and less likely to develop a coating of sugar crystals if it is coated with a dilute pectin solution made as follows:

Dissolve 2 level tablespoons dry pectin by stirring into 1 quart hot water. Allow mixture to cool. (If desired, commercial pectin sirup may be used—1 part pectin sirup to 3 parts water.)

Remove fruit from final sirup (see 5, above). Dip quickly into hot water. Drain to remove excess sirup. Dip fruit into

pectin solution, which should be at room temperature. Drain and dry until no longer sticky—about 24 hours at room temperature or 2 or 3 hours at 130° F.

### **8. Preserving fruit in final sirup**

If you wish to store the fruit in its final sirup and glacé it later, simply bring fruit and sirup to a boil and seal, scalding hot, in fruit jars or cans. No further treatment is necessary; fruit thus stored will keep indefinitely. When ready to use, simply open the jar, drain and dry the fruit, and glacé (see 7, above).

### **9. What to do with leftover sirup**

There is usually a fairly large amount of sirup left after the candy has been made. Do not waste it. Here are some ways to use it:

**A.** Use it instead of sugar, for making jelly. For each cup of sugar called for in your jelly recipe, use  $\frac{2}{3}$  cup of leftover candy sirup instead.

**B.** Use it as a table sirup.

**C.** Make fondant, as follows: Add 1 pound of sugar to each pound of sirup; cook to 240°–242° F (medium ball). Cool to about 110° F. Stir vigorously until sirup becomes grainy or creamy. Work to a smooth fondant and flavor with ground candied fruit or vanilla.

Sometimes the sirup will not cream properly. It is therefore advisable to test it by making only a small batch of fondant at first. If unsuitable for fondant, use the sirup as suggested above.

### **10. How to prevent spoilage**

Dry candied fruit thoroughly before packing, otherwise it may mold.

Candied fruit stored for a long time may become hard or filled with sugar crystals. If this happens, boil the candy in water until tender, put it through the complete candying process described above (pp. 8–9), but use a larger proportion of corn or invert sirup to prevent crystallization.

The fruit may shrivel during the sirup treatment. This usually means that it was

not cooked enough during the first boiling. If this happens, place the fruit in water, boil, and let stand until tender and plump. Then return it to the sirup and proceed with the candying process.

Candied fruit packed in boxes may become infested with insects. Use boxed fruit candy within 6 to 8 weeks after packing unless the containers are insect-proof or the candy is held in cold storage.

### **Special directions for Maraschino Cherries**

Candied cherries are usually artificially colored and flavored. The fruit must be treated with sulfurous acid solution before being candied, so that it will absorb color properly.

Use firm, ripe Royal Ann cherries. Do not remove stems or pits. Place cherries in a stone crock, wooden keg, or fruit jar (glass-topped kind only). Prepare the following solution:

1 gallon water

1 oz. (about 3 level tablespoons) sodium bisulfite. (Buy this from a drugstore or camera shop.)

$\frac{1}{2}$  oz. (about 2 level tablespoons)  
powdered citric acid

Dissolve all ingredients and cover cherries with the solution. Seal in fruit jars or cover in stone crock, and set aside for 2 weeks or longer. At the end of that time, discard the solution. Stem and pit cherries, boil them in five or six changes of water until tender and free of sulfur taste.

Prepare a “first sirup” (see step 2, p. 8). Add enough red food coloring to give sirup the desired tint, and 1 level teaspoon citric acid. Proceed according to directions for glacéed fruit (pp. 8–9), adding more red coloring if needed.

When the final sirup is reached, add a very small amount of wild cherry flavoring. Store for 2 weeks. Drain, and follow directions given above for other candied fruit.

Green coloring with mint flavoring may be used as a variation if desired.

# Fruit Jelly Candies

These may be made from any tart fruit juice or purée by adding fruit pectin and sugar, and cooking to a stiff jellifying point (fig. 6).

## Pointers for preparing fruit

1. Fruits deficient in acid should have their acidity increased by addition of citric or tartaric acid. The simplest way, for the homemaker, is to add lemon juice at the rate of about 1 pint lemon juice to 6 pints juice or purée.

These fruits *do not* require additional acid: loganberry, boysenberry, grapefruit, orange, plum, sour apple, and “slip-skin” grape, such as Concord or Pierce Isabella.

These fruits *do* require additional acid: ripe apricot, peach, pear, ripe vinifera grape (California or European).

2. To extract juice from fresh berries and juice grapes, crush fruit and boil for

2 or 3 minutes in its own juice. Drain through a jelly bag.

Slice apples, pears, and peaches; crush plums. Cover with water. Boil until soft. Drain through a jelly bag.

For citrus fruits, simply remove juice. No boiling is necessary.

3. If purée is to be used instead of juice, prepare fruit as follows: remove pits or cores, and peel fresh peaches, pears, and apricots. Cover fruit with water; boil until soft. Rub through a sieve. Apples, plums, and cherries need not be peeled.

Use the following basic recipe:

- 1 cup fruit juice or purée
- ¾ cup sugar
- ¾ cup corn sirup
- ½ cup commercial pectin sirup

Mix juice or purée and pectin sirup. Add sugar and corn sirup. Stir until well mixed. Heat to boiling, stirring constantly. Insert candy ther-



Fig. 6. These assorted fruit jelly candies are colorful, tasty, and nutritious.

mometer and boil to 222°–223° F, or until liquid drops in a sheet from the cooking spoon or jells on a cold saucer. Remove from heat.

Pour to a depth of about  $\frac{3}{4}$  inch in a pan that has been oiled or lined with waxed paper. Allow to harden overnight. Cut into squares, spread on waxed paper, and let stand 24 to 48 hours, until the surface is slightly dry. Roll each piece in coarse table sugar—the coarser the better.

Use this candy within a few days. It may become sirupy on the surface if kept longer.

**Variations:** After jelly is cooked, stir in  $\frac{1}{4}$  cup chopped nuts or 1 cup chopped dried fruit, or both. Whole raisins may also be added if desired, in place of the dried fruit.

If you prefer, you may pour the hot jelly into starch molds (see p. 4) and allow it to stand overnight to jell and cool. After the jelly pieces have been shaken out of the molds, wipe them free of starch with a damp cloth, and roll them in sugar.

Another variation is to coat the jelly candies with chocolate or fondant (see pp. 5–6). The surface of the candy must be thoroughly dried, either by leaving the pieces on wire screen trays for several days before dipping or by drying at 130° F in a dehydrater (see p. 4). Jelly candies that have been cast in starch usually do not require additional drying. Candy should be cool (not above room temperature) when dipped.

Chocolate coating is usually more satisfactory if the jelly pieces are first coated with fondant. Otherwise, “weeping” of the jelly inside the chocolate coating may cause it to leak, turn gray, or crack.

**NOTE:** We have not had success in making fruit jelly candies with ordinary household pectin powder, but with commercial powdered pectins used by jelly manufacturers, results have been very satisfactory. These pectin powders are not obtainable from your grocer, but must be bought from a pectin manufacturer or a jelly factory. If such powder

is available and you wish to use it, follow this basic recipe:

- 2 cups fruit juice or purée
- 2 level tablespoons powdered pectin
- $\frac{1}{4}$  cups sugar
- $\frac{1}{4}$  cups corn sirup

Add half the sugar to the juice. Stir until dissolved. Heat to boiling and slowly stir in pectin previously mixed with remaining dry sugar. Heat and stir until dissolved. Add the corn sirup. Stir well. Heat to boiling, and boil to 222°–223° F, or until a stiff jelly is formed. Cool, cut, and roll in sugar as described above.

## Panoche with Dried Fruit

Panoche is similar to fudge in color, texture, and flavor, and is an excellent base or binder for chopped dried fruits and nuts (fig. 7).

- 1 cup brown sugar
- $2\frac{1}{2}$  tablespoons unsweetened condensed milk
- $2\frac{1}{2}$  tablespoons corn sirup
- 1 teaspoon butter
- 1 cup chopped dried fruits
- $\frac{1}{2}$  cup chopped nuts
- Pinch of salt

Cook sugar, milk, corn sirup, and salt to 238°–240° F (soft ball). Add butter. Cool several minutes. Then beat or stir vigorously until creaming begins. Add chopped dried fruit and nuts. Stir well. Spread evenly in pan that has been oiled or lined with waxed paper, and allow to harden. Cut into squares.

## Chocolate Fudge with Fruit

Chocolate fudge does not blend quite so well with fruit as do some other candies, but if you wish to experiment, here is a basic recipe (or use your own favorite):

- 2 cups sugar
- $\frac{3}{4}$  cup unsweetened condensed milk
- $\frac{1}{3}$  cup corn sirup
- 2 ounces bar chocolate
- $1\frac{1}{2}$  teaspoons butter
- $1\frac{1}{4}$  cups chopped dried fruit or candied fruit or whole raisins or mixed fruit and raisins
- $\frac{1}{2}$  cup chopped walnuts or almonds
- Pinch of salt

Melt chocolate in 2-quart double boiler, over hot water. Add condensed milk slowly, stirring until mixture is smooth. Cook sugar, milk, corn sirup, salt, and chocolate to 240° F (medium ball) over direct flame or other direct source of heat. Add butter, and allow to cool a short time. Stir until nearly stiff enough to pour. Add fruit and/or nuts; mix thoroughly. Spread in oiled pan or on waxed paper, to harden. Cut into squares.

## Divinity Fudge with Fruit

Although divinity is more difficult to prepare than chocolate fudge, its flavor is better with fruit. Either dried or candied fruit or whole raisins may be used in this recipe.

- 1 cup sugar
- 2 tablespoons corn sirup
- ½ cup water
- 1 stiffly beaten egg white
- 1 cup chopped or ground dried fruit
- ⅔ cup chopped walnuts or almonds

Cook sugar, corn sirup, and water to 252° F (light crack stage). Add this hot sirup slowly to stiffly beaten egg white. Beat mixture until it is stiff. (Do not add sirup too fast and do not spare the "elbow grease" in beating. If you do, the mixture may be gummy.)

Mix chopped fruit and nuts well. Add to fudge and beat until well mixed. Spread in oiled pan or on waxed paper to harden. Cut into squares.

## Fondants with Fruit

### I. Cold-mix Fondant

This is allowed to stand overnight before the fruit is added.

- 3 cups sugar
- ½ cup corn sirup, invert sirup, or honey
- ⅔ cup water

Mix all ingredients. Cook, stirring occasionally, to 240° F (soft ball). Cool slightly. Stir until mixture is thick and creamy (soft fondant stage). Place in a wide-mouth jar; cover with damp, not wet, cloth for several hours, or overnight.

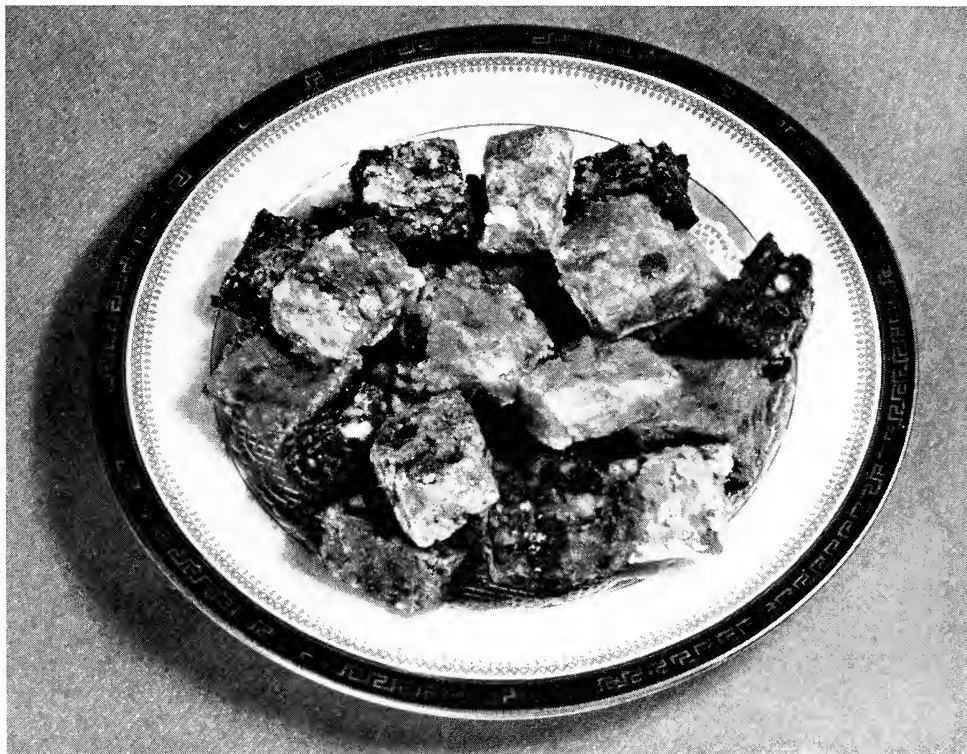


Fig. 7. Fudge and panache are both enriched by addition of dried fruits and nuts.

To each cup of fondant add  $\frac{1}{2}$  to  $\frac{3}{4}$  cup chopped or ground dried fruit. (The larger amount is used if the fruit is very dry; less moist fruit is required.) Mix well, using a heavy metal spoon or the hands. Form by hand into pieces of desired size, or spread on waxed paper to harden and cut into squares.

If the fondant is too stiff to work, warm it in a double boiler until it softens.

**Variations.** In place of dried fruit, you may use chopped candied fruit; chopped, well-drained fruit preserves; or a small amount of fresh fruit sirup.

If you use a fruit sirup, prepare it as follows:

Crush fruit. Heat to boiling, in its own juice. Strain through jelly bag or cloth. To each cup of juice add 2 cups sugar. Mix well. Heat to boiling for 2 minutes. Cool thoroughly. Use  $\frac{1}{4}$  cup of this sirup for each cup of fondant.

The pieces may be dipped in chocolate if desired (see p. 5).

Shredded coconut is good with fondant. Mix with fruit and nuts, to taste.

Powdered milk may be added to this cold-mix recipe. It improves the food value and enriches the flavor. Use 3 level tablespoons per cup of fruit-fondant mix. The powdered milk must be fresh; otherwise it will result in a disagreeable flavor and odor.

## II. Warm-mix Fondant

Use recipe given above (I), but add fruit and nuts while the fondant is still warm. Stir until mixture is firm.

## III. Fondant Cooked with Fruit

This recipe usually gives good results. However, cooking time is very important. If cooked too long, it results in sirup rather than fondant.

- 1  $\frac{1}{3}$  cups sugar
- $\frac{1}{3}$  cup water
- 2 level tablespoons corn sirup
- $\frac{1}{2}$  cup chopped dried or candied fruit
- $\frac{1}{2}$  cup chopped nuts
- $\frac{1}{3}$  cup fondant (recipe I), finely ground or broken into small pieces

Cook sugar, water, and corn sirup to 245° F (stiff ball). Add fruit, and cook to 240° F (medium ball). Add nuts and fondant. Stir until stiff and creamy. Spread in oiled pan or on waxed paper, to harden. Cut into squares.

## IV. Puffed Fondant

When combined with fruit, fondant is sometimes rather "heavy." Its texture can be lightened by addition of baking powder or baking soda. Baking powder is better because it does not reduce the acidity of the fruit.

- 1  $\frac{1}{3}$  cups sugar
- 4 tablespoons corn sirup
- $\frac{1}{3}$  cup water
- 1 cup chopped dried fruit
- $\frac{1}{2}$  cup chopped nuts
- 1 teaspoon baking powder or  $\frac{1}{2}$  teaspoon baking soda

Cook sugar, corn sirup, and water to 242° F (medium soft ball). Cool slightly. Add fruit and nuts. Stir until well creamed but not very stiff. Stir in baking powder or baking soda. Spread in oiled pan or on waxed paper, to harden. Cut into squares.

## Fruit Nougat

Nougat is not so good a binder for fruits as are some of the other candies, and is more difficult to make because it requires two separate processes.

### Step 1.

- $\frac{1}{2}$  cup sugar
- 4 tablespoons corn sirup
- $\frac{1}{3}$  cup water
- 2 egg whites

Cook sugar, water, and corn sirup to 252° F (hard ball). Beat egg whites thoroughly. Slowly beat them into the boiling hot sirup. Beat until stiff.

### Step 2.

- $\frac{5}{8}$  or  $\frac{3}{4}$  cup sugar
- 2 tablespoons corn sirup
- $\frac{1}{4}$  cup water

Cook all ingredients to 280° F (brittle crack), and add Step 1 mixture. Beat until stiff and light. Add:

- 2 tablespoons melted butter
- 2 cups chopped dried fruit
- 1 cup chopped nuts (use 3 cups nuts if no fruit is used)
- ½ cup chopped or shredded coconut (optional)

Beat vigorously until well mixed. Spread in oiled pan or on waxed paper to harden. Cut into squares.

## Fruit with Marshmallow

Commercial marshmallows are best for this, but if you wish to make your own, a recipe is given below.

- 1 dozen commercial marshmallows
- 2 cups dried fruit
- ⅓ cup chopped nuts

Put all ingredients through food grinder, using coarse knife. Be sure that the mixture is uniform. Dust the mixture with powdered sugar. Roll out on waxed paper that has also been dusted with powdered sugar. Let stand overnight. Cut into squares; dust with powdered sugar.

**Variations.** Substitute well-drained fruit preserve for the dried fruit. Use only ⅔ cup.

Or use fruit sirup—just enough to flavor and color the marshmallow. Too much will make the mixture sticky.

## Homemade Marshmallow

- 3 tablespoons plain gelatin powder
- ½ cup hot water
- 1½ cups corn sirup
- 1½ cups powdered sugar
- 1½ cups chopped dried fruit
- ½ cup chopped nuts
- Vanilla to taste

Dissolve gelatin in hot water. Cook corn sirup to 250° F (hard ball). Mix gelatin solution and powdered sugar; beat in corn sirup until mixture is light. Add vanilla. Add fruit and nuts. Mix well, and beat a short time. Dust mixture generously with powdered sugar. Spread on waxed paper that has also been dusted with powdered sugar. Let stand overnight. Cut into squares and dust with powdered sugar.

## Fruit Brittle

Fruit used in this recipe must be very dry or it will make the brittle sticky.

- 1 cup sugar
- 5 tablespoons corn sirup
- ¼ cup water
- ½ cup coarsely chopped nuts
- 2½ teaspoons butter
- ¼ cup chopped dried fruit
- ¼ teaspoon salt
- ½ teaspoon baking soda
- Vanilla to taste

Cook sugar, corn sirup, and water to 275° F (brittle crack). Add nuts and cook until they are the color of butter. Remove from heat; add butter. Mix well; add fruit and salt. Mix. Let stand 1 minute. Quickly stir in soda and vanilla. Pour into oiled pan to harden.

## Popcorn and Fruit Crisp

This is a recipe the children may like to try.

- 1 cup sugar
- ½ cup corn sirup
- ⅓ cup water
- 1½ teaspoons butter
- ¼ cup chopped dried fruit or whole seedless raisins
- Salt to taste
- 3 cups popped popcorn

Cook sugar, corn sirup, and water to 285° F (hard crack). Add butter, salt, and fruit. Stir well. Stir in popcorn. Spread in oiled pan to harden. Break or cut into pieces.

## Uncooked Fruit Candy

### Recipe I

The ingredients serve as a binder for the fruit and nuts.

- 3 egg whites
- 2 cups powdered sugar
- ¾ cup powdered milk
- 1 cup chopped dried fruit
- ½ cup chopped walnuts or almonds
- ½ teaspoon vanilla

Beat egg whites thoroughly until light. Slowly stir in powdered sugar and powdered milk. Mix nuts and fruit thoroughly. Stir into egg white mixture. Add vanilla. Mix thoroughly. Pour into oiled pan or on waxed paper to harden. Cut into squares.



## Recipe II\*

- $\frac{3}{8}$  cup sweetened condensed milk
- 4 cups finely sifted powdered sugar
- 1 teaspoon vanilla

Warm condensed milk in double boiler until it is thin enough for mixing. Remove from heat. Add vanilla. Add powdered sugar gradually, mixing until smooth and creamy. To each cup of this mixture add  $\frac{2}{3}$  cup chopped dried fruit and  $\frac{1}{2}$  cup chopped nuts. Mix well. Pour into oiled pan to harden. Cut into squares.

## Recipe III

Fruit used in this recipe should not be over-dry or tough. Use the raisins whole. Grind all other fruit coarsely. In measuring the ground fruit, pack it tightly into the measuring cup.

- 1 cup ground, dried apricots or peaches
- 1 cup whole seedless raisins
- 1 cup ground dried figs or pitted dates
- $\frac{1}{2}$  cup corn sirup or honey
- $\frac{1}{2}$  cup chopped almonds or walnuts
- $\frac{1}{2}$  cup chopped shredded coconut (optional)

Mix fruits by passing them through a food grinder, using coarse blade. Mix fruits and nuts thoroughly with hands. Place mixture in double boiler and add corn sirup or honey. Warm until soft. Mix thoroughly. Pour into oiled pan or on waxed paper to harden. Cut into squares and roll them in table sugar or ground coconut.

NOTE: If fruit seems too dry, heat in boiling water until tender (2 or 3 minutes). Drain; let stand overnight.

If candy is too soft when poured, add more fruit.

## Dried Fruit with Binders

### I. White Coating Binder

Commercial white coating is sold only in 10-pound slabs, by confectioners' supply houses. If you can obtain it, use it instead of the homemade recipe given here, as it will give better results.

\* We are indebted to The Borden Company for the basic recipe.

- 1 cup vegetable shortening (of high melting point preferred)
- 2 cups sifted powdered sugar
- Vanilla to taste

Melt shortening over warm, not hot, water in a double boiler. Slowly stir in powdered sugar. Add vanilla. Work mixture until smooth. If the mixture is too thin, add more powdered sugar; if too thick, add more shortening. If commercial confectioners' white coating is used, slice it and melt it in a double boiler. Cool until it begins to thicken. Then use as directed for homemade white coating.

#### Mix together:

- 1 cup coarsely ground dried fruit (preferably figs or apricots)
- 1 cup seedless raisins
- $\frac{3}{4}$  cup chopped walnuts or almonds
- $\frac{1}{2}$  to  $\frac{3}{4}$  cup chopped or shredded coconut (optional)

Separate mixture into small pieces. Dust each piece with powdered sugar. Add mixture to 1 cup of melted white coating. Mix thoroughly. Spread on waxed paper; let harden overnight. Cut into squares.

NOTE: Toasted almonds or plain walnuts may be dipped in the white coating described above. Simply follow directions for dipping candies in chocolate (p. 5).

Homemade white coating sometimes stays soft. If this happens, place candy in refrigerator for several hours before serving.

## II. Dipping Chocolate Binder

Be sure to use dipping chocolate for this recipe. It is usually available at a grocery store, confectioners' supply house, or chocolate manufacturer's.

- 7 oz. dipping chocolate (makes  $\frac{3}{4}$  cup when melted)
- 1 cup chopped or coarsely ground dried fruit
- $\frac{1}{2}$  cup powdered sugar
- $\frac{3}{4}$  cup chopped walnuts or almonds
- $\frac{1}{2}$  cup shredded coconut (optional)

Mix fruit, powdered sugar, and nuts with the hands. Crumble into small pieces.

Cut chocolate into thin shavings. Melt in top of double boiler over warm, not hot, water.

Stir until chocolate is thoroughly melted and smooth.

Add fruit mixture to melted chocolate. Mix thoroughly. Allow mixture to become slightly stiffened. Pour into oiled pan to harden. Cut into squares.

## Fruit Bars

Any of the binders described, such as corn sirup (alone, or with powdered sugar), fondant, chocolate, or white coating, may be combined with ground dried fruit and chopped nuts, and formed into candy bars. The bars may be rolled in grated or shredded coconut, chopped nuts, or sugar. Or they may be dipped in chocolate or white coating. (If attractively wrapped and labeled, such bars might be sold at a roadside fruit stand.)

## Salted Almonds

Bring a pan of water to a boil. Remove from heat. Place shelled almonds in the hot water and leave them until the skins slip easily—about 2 minutes.

Remove almonds from hot water. Drain. Slip skins off almonds with the fingers. Add salt to taste—about  $\frac{1}{2}$  teaspoon per cup of nuts. Mix well so that all nuts are coated with salt.

The next step involves either cooking in oil or oven cooking. Both methods are given here, but oven cooking is the better one for home use.

**1. Oven cooking.** Place blanched, salted almonds in a shallow pan in moderate oven ( $360^{\circ}$ – $400^{\circ}$  F). Stir frequently, and heat until almonds are golden yellow—15 to 25 minutes. Remove from oven and cool nuts quickly in another pan. Do not heat nuts too long or they will be scorched.

NOTE: Unblanched almonds may be oven-cooked in the same manner. If they are to be salted, moisten them with water and sprinkle with salt before putting them into the oven.

**2. Oil cooking.** Pour any good cooking fat or oil (preferably peanut oil) into a pan to a depth of 3 inches. Heat to a

good frying temperature but not to the smoking point ( $290^{\circ}$ – $300^{\circ}$  F). If no thermometer is available, test by dropping a small piece of white bread into the hot fat. It should brown in about 1 minute.

Place blanched, salted almonds in wire screen frying basket and lower them into the hot fat. Cook until they are golden yellow. At  $290^{\circ}$ – $300^{\circ}$  F, cooking time is usually 5 to 7 minutes. Remove nuts, drain, and cool.

## Sugared Almonds and Walnuts

These are fondant-coated nuts. Honey or invert sirup is recommended instead of corn sirup because it makes a coating that is less likely to become too dry and hard if the candy is stored for a few weeks.

Use plain, shelled walnuts. The almonds may be unblanched and toasted, or blanched and oven- or oil-cooked. (See column at left.)

3 cups almonds or walnuts  
1 cup sugar  
2 tablespoons honey or invert sirup  
 $\frac{1}{4}$  cup water  
Vanilla to taste

Cook water, honey, and sugar to  $240^{\circ}$ – $242^{\circ}$  F (soft ball). Stir until sirup begins to cream but is still thin and fluid. Add nuts and vanilla. Continue stirring until fondant thickens but is still pliable. Separate coated nuts with the fingers and place on waxed paper to cool.

**Variations.** Add  $\frac{1}{8}$  cup sweet, ground chocolate to the hot sirup before coating the nuts. Or, for spiced nuts, add 1 teaspoon powdered cinnamon to the hot sirup.

## Turrón de Almendras (Spanish Almond Candy)

Two kinds of almond candy are popular in Spain—"turrón de Alicante" is a de luxe type almond brittle, and "turrón de Jijona," a soft, almost dusty confection made by grinding turrón de Alicante.

This recipe is a modification of published Spanish formulas, and has been adapted to our recipe style.

- 5/8 or 3/4 cup best quality honey
- 3 1/4 cups sugar
- 4 3/4 cups blanched, toasted, unsalted almonds
- 1/2 teaspoon powdered cinnamon
- 1 egg white

Beat egg white with about 1/4 cup of the sugar, until stiff and fluffy. (Sugar prevents curdling of the egg white when it is mixed with the hot sirup.) Heat honey almost to boiling. Slowly stir in remainder of the sugar. **Do not add the egg white at this time.** Cook honey and sugar to 292° F, stirring during cooking. Add beaten egg white and stir briskly and thoroughly. Again cook to 292° F. Remove from heat.

Add almonds and cinnamon. Mix well and spread in oiled pan to harden. When hard, the candy may be broken into pieces. Or it may be put through a kitchen food grinder and made into turrón de Jijona. (This form is less hard on the teeth.)

**NOTE:** If available, confectioners' edible wafer is a help in making this candy. It is a thin, brittle, paper-like material that prevents a sticky surface. Pour the candy onto a sheet of the wafer, to harden. Another sheet may be placed on top of the hot candy. As indicated, this material is edible, and need not be removed when the candy has hardened.

## Almond and Walnut Powders

These keep well, and add a pleasing flavor to candies, cake fillings and frostings, milk shakes, ice cream, and other confections.

- 1 3/4 cups ground, blanched almonds or unblanched walnuts (use medium-fine knife in food grinder)
- 1 3/4 cups powdered sugar

Mix nuts and powdered sugar well. Put through food grinder, using nut butter attachment. (If the nut butter attachment binds or sticks, use grinder knife with 10 or 16 blades.) Add 3 1/2 cups more of powdered sugar. Mix well. Grind again. Store in a sealed jar.

## Suggestions for use

**Fondant.** Mix nut powder with small amount of honey or table sirup until mixture is thick enough to be formed into small pieces. Place on waxed paper and allow to harden overnight.

Or add nut powder to melted fondant, chocolate, fudge, or other candies.

**Frosting.** Beat 1 egg white until it is stiff. Stir in enough nut powder to make a mixture of the right consistency for frosting.

**Macaroons.** Beat 1 egg white until it is stiff. Add about 1 cup almond powder and a few drops of almond extract. Mix well. Drop from spoon onto oiled baking pan. Bake at 350°-375° F until light golden in color—about 15 minutes. Cool before serving.

## Sugared, Sliced Almonds and Walnuts

Use freshly blanched almonds, while they are still warm, or unblanched walnuts. (If walnuts shatter badly when sliced, soak them in warm water for a few minutes, then drain and slice.)

Slice nuts into thin pieces, using a kitchen slicer if available. Or chop into small pieces in a chopping bowl.

Moisten slightly with a fine spray of water. Drain if necessary. Roll in fine-grained table sugar or powdered sugar. Sift out excess sugar through a fine screen. Spread nuts on screen and dry thoroughly for several days at room temperature. Store in a sealed jar.

These nuts may be used in candies, frostings, fillings, cookies, and so forth.

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Although very little has been published on the use of fruit in candy, most household cook books contain candy recipes to which dried fruits might be added. The following is a list of useful books containing candy formulas, general principles, and general directions for making candy.

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